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reference, however, does not describe or suggest voluntary selection by a user to access "personal genetic nucleotide profile" for automated electronic transaction.

O'Flaherty teaches system and method for managing data privacy in a database management system, among other things, wherein data in database tables is controllably accessible according to privacy parameters stored in the database table (see Abstract). In particular, O'Flaherty (cols. 9-10) describes restricting access to opted-out columns applicable to personal or privacy data categories, such as age, gender hiking interest, or shoe brand preference. This reference, however, does not describe or suggest voluntary selection by a user to access "personal genetic nucleotide profile" for automated electronic transaction.

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Hence, neither Hoffman nor O'Flaherty teaches or suggestes applicant's claimed invention, which in significant part require that voluntarily-selected portion of personal genetic nucleotide profile of user be permitted access electronically for automated transaction. Hoffman so-called biometric sample merely refers to fingerprint, voice, palm print, or retinal information for user authentication. Moreover, O'Flaherty merely describes privacy opt-out scheme for database management, without reference to personal genetic nucleotide information that is voluntarily-selected for automated electronic transaction.

In comparison, applicant's claimed invention advantageously enables automated electronic transaction that require personal genetic nucleotide profile for proper business transaction with the user (e.g., in insurance scenario to determine user health or risk condition from the personal genetic nucleotide profile.) Additionally, applicant's automated transaction scheme requires that the personal genetic nucleotide profile be permitted access to by the user on voluntarily-selected portion basis. None of the cited references individually or in combination describes or suggests applicant's claimed invention. Therefore, applicant believes that rejection of claims 1, 5, 7, 8, 11, 12, 21-25 and 27 under 35USC103a are overcome.

Beecham teaches method, apparatus and system for verification of human medical data, among other things, wherein genetic testing of disease and hereditary susceptibility to diseases or specific conditions is performed (col. 5 lines 27-44), particularly since public attention focused on issues "because they may be used to discriminate against some people in specific settings" like employment and health insurance. This reference, however, does not describe or suggest

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voluntary selection by a user to access "personal genetic nucleotide profile" for automated electronic transaction.

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Applicants argue that Beecham, in fact, <u>teaches away</u> from applicant's invention. This reference clearly discourages individuals from revealing or otherwise permitting access to genetic test data. Beecham specifically teaches away from individuals voluntarily disclosing personal genetic profile, since "... there may be concern that these data, if made available or seized from the doctor, could be used to discriminate against the individual ... fear[ing] that if the genetic test results were known to industry, discrimination may occur against individuals with genetic predisposition to disease." (see col. 18, lines 31-46). Prior art that teach-away from the invention is "strongly probative of nonobviousness." *Kloster Speedsteel AB v. Crucible Inc.*, 793 F.2d 1565, 230 USPQ 81 (Fed. Cir. 1986), *on rehearing*, 231 USPQ 160 (Fed. Cir. 1986).

As a whole, applicant's invention advantageously enables automated electronic transaction that require personal genetic nucleotide profile for proper business transaction with the user, in an unobvious way that motivates effectively favorable discrimination (e.g., to give certain genetically-advantaged individuals reason to request insurance fee discounting by revealing certain personal genetic nucleotide portion.) Neither Hoffman, O'Flaherty nor Beecham individually or in combination describes or suggests applicant's claimed invention. Therefore, applicant believes that rejection of claims 2-4, 6, 9, 10 and 28 under 35USC103a are overcome.

Rigault teaches system and method for a precompiled database for biomolecular sequence information. Neither Hoffman, O'Flaherty, Beecham nor Rigault individually or in combination describe or suggest applicant's claimed invention, as described above. Therefore, applicant believes that rejection of claim 26 under 35USC103a are overcome.

In view of above, it is respectfully submitted by applicant that claims are in condition for allowance. Reconsideration of rejections is requested. For convenience, a FAX copy of this paper is transmitted (703-305-7687) to the Examiner.

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Respectfully submitted,

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"VERSION WITH MARKINGS TO SHOW CHANGES MADE"

In the Specification:

Please amend paragraph on page 6, lines 15-20:

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--Additionally, such data structure may include application-specific transaction control and payload fields, depending on user-authorized transaction basis. Optionally, data structure may be provided digitally in representative electronic signal form which may be encoded, compressed, transmitted, stored, received, and decoded, according to one or more secure signal or data modulation scheme, as spread spectrum, or other time/frequency/code-division multiple access (T/F/CDMA) scheme.--